AF-12 – Increase Fire Management and Risk Reduction Programs

Benefit/Cost of Reducing CO₂e:

less than 0.1-1.0 MMt¹³ between 2007-2020; uncertain cost Colorado:

3.2 MMt between 2007-2025; 3.3% of 2025 emissions; cost effective 14 Oregon

Assessment: High Priority. Bin A. 9 out of 22 votes.

It is critical to avoid catastrophic carbon releases from forest fires.

Healthy forests take up carbon and sequester it, and healthy forests are less likely to burn. An entire forest could be lost in a fire. Reducing fires produces an important public safety benefit; other co-benefits are forest health, recreation, and wildlife.

Burning woody biomass is considered to be carbon neutral. If it is left it in the forest, it would burn or decompose anyway. If it is burned in a controlled fashion, there is less particulate.

Better funding and more research on the role of forest fires in climate change are needed. 15 Utah receives \$1 million annual under the Federal fire plan. With a reduced budget, the focus is on the wildland-urban interface. Rural fires allowed to burn after years of fuel build-up burn unnaturally hot, baking the soil and killing trees that otherwise might not burn in a less hot fire. There is a need to reset the burning temperature by restoring a more natural fire regime.

There is a conflict with environmental advocates who oppose development of roads to fight fires, or to harvest any small diameter biomass, because affected lands can then no longer qualify for wilderness. Reducing fuels with natural or prescribed fire would still qualify these areas.

It is expensive to do mechanical thinning. ¹⁶ Some of the cost can be offset if the wood can be sold, but there typically aren't markets for forest biomass. Another "thinning" option is stewardship contracting – allowing timber companies to cut big trees to pay for the cost of removing the smaller ones, a move opposed by some environmental groups. Utah has signed a MOU that promotes the use of stewardship contracts. Agencies can retain receipts from harvesting and use them locally, unlike regular timber sales. There is also no need to award contracts to the lowest bid contractor, the State can consider other factors such as use of labor from the local community.

¹³ Reductions may be low because primary objective is not carbon sequestration.

¹⁴ Creating a market for biomass from forests is key to this option. It would be important to locate biomass fueled generating plants close to forests to reduce the economic and GHG costs of shipping.

¹⁵ See Steve Running's research on global warming and increasing forest fires (http://www.sciencemag.org/cgi/content/full/313/5789/927). \$900-1300/acre to thin